Process according to claim 1 in which the enzyme is:

(i) $P450_{cam}$, or
(ii) a naturally occurring homologue of (i), or
(iii) a mutant of (i) or (ii).

Process according to claim 4 in which the enzyme is one in which amino acid 96 of $P450_{cam}$, or the equivalent amino acid in a homologue, has been changed to an amino acid with a less polar side-chain.

Process according to claim 1 in which the halogen is chlorine.

Process according to claim 1 in which the aromatic compound is a benzene or biphenyl.

Process for oxidising a halo aromatic substrate, which process comprises oxidising said substrate with a monooxygenase enzyme, wherein the substrate is 1, 2-dichlorobenzene, 1, 2, 4- trichlorobenzene, 3,3'-dichlorobiphenyl, 2,2',4,5,5'-pentachlorobiphenyl, pentachlorobenzene or hexachlorobenzene

Process according to claim 8 in which the enzyme is:

(i) $P450_{cam}$, or
(ii) a naturally occurring homologue of (i), or
(iii) a mutant of (i) or (ii).

Process according to claim 1 which is carried out in a cell that expresses:

(a) a monooxygenase enzyme;
(b) an electron transfer reductase; and
(c) an electron transfer redoxin.

Process according to claim 10 in which (b) is putidaretoxin reductase or a homologue; or a fragment thereof; and/or (c) is putidaretoxin or a homologue; or a fragment thereof.

Process according to claim 10 wherein the cell is one in which the enzyme (a) does not naturally occur.

Process for oxidising a halo aromatic substrate which has more than one halogen atom, which process comprises oxidising said substrate with a monooxygenase enzyme, wherein a ring carbon of the substrate is oxidised , the process being carried out in a cell that expresses:

(a) a monooxygenase enzyme;
(b) an electron transfer reductase; and
(c) an electron transfer redoxin,

wherein the cell is one which in its naturally occurring form is able to oxidise a halo aromatic substrate.

A cell as defined in claim 13.